

U.S. DEPARTMENT OF ENERGY Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Monday Evening, June 20, 2011

Major Developments

Weekend Storms Sweep through U.S. Midwest and South, Knocking Out Power to Over 370,000 Customers June 18-20

At least one person was killed in Georgia as strong storms caused damage across the U.S. Midwest and South over the weekend. According to various reports, at least two tornadoes touched down in Kentucky, while large hail fell in Missouri. In addition to the power outages listed below, an electrical transformer reportedly caught fire during the storms in Hallsville, Missouri.

U.S. Midwest and South Customer Power Outages				
June 18-20				
Electric Utility	State	Peak	Latest Reported	
Duke Energy	NC/SC	82,000	2,105	
Progress Energy	NC/SC	65,000	1,303	
KCP&L	MO/KS	65,000	175	
Ameren	MO	19,702	418	
Georgia Power	GA	63,000	1,600	
North Georgia EMC	GA	6,500	1,000	
LG&E	KY	38,000	368	
Ameren	IL	16,620	147	
Duke Energy	IN	11,974	1,529	
IPL	IN	4,500	1,851	
TOTAL*		372,296	10,496	

^{*}Total outages only represent electric utilities listed in this table.

Sources:

Duke Energy: http://twitter.com/#!/DukeEnergyStorm/status/82440597947949056, http://www.duke-energy.com/north-carolina/outages/current.asp, http://www.duke-energy.com/indiana/outages/current.asp https://www.progress-energy.com/app/outagemaps/carolinas.aspx

KCP&L: http://www.kansascity.com/2011/06/18/2959869/high-winds-wreak-havoc-in-area.html,

http://www.kcpl.com/kcmaps/frameset_menus.htm

Ameren: http://www.ameren.com/sites/aue/OutageCenter/Pages/OutageMapPlus.aspx,

http://www.ameren.com/sites/aiu/OutageCenter/Pages/default.aspx

Georgia Power: http://www.upi.com/Top-News/US/2011/06/18/Severe-storms-race-across-Georgia-Florida/UPI-36431308453660/, http://nomenews-tribune.com/view/full_story/14372837/article-Ga--Power--Service-restored-to-Floyd-County--1-600-without-power-regionally?instance=home_Most_popular

North Georgia EMC: http://romenews-tribune.com/view/full-story/14377103/article-North-GA-EMC-working-to-restore-power-to-customers-?instance=home_news,

http://www.wdef.com/news/9_000_north_georgia_emc_customers_without_power_sunday/06/2011

LG&E: http://www.wave3.com/story/14937272/storms-leave-thousands-without-power-in-ky

, http://stormcenter.lge-ku.com/default.html

IPL: http://apps.iplpower.com/outages/outagemap.aspx, http://www.theindychannel.com/weather/28293284/detail.html

Dominion's 871 MW Millstone Nuclear Unit 2 in Connecticut Reduced to 30 Percent by June 20

The Nuclear Regulatory Commission reported that on the morning of June 19 the unit was operating at full power. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Southern's 856 MW Hatch Nuclear Unit 1 in Georgia Reduced to 76 Percent by June 19, Ramped Up to 94 Percent by June 20

The Nuclear Regulatory Commission reported that on the morning of June 18 the unit was operating at 89 percent. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Update: Dominion's 815 MW Surry Nuclear Unit 2 in Virginia Ramped Up to 94 Percent by June 20

A tornado on April 16 forced units 1 and 2 offline. Unit 1 was restarted after the tornado and has been running at full power, while unit 2 remained shut due to a claim of asbestos exposure. The Nuclear Regulatory Commission reported that on the morning of June 17 the unit was operating at 30 percent.

http://www.therepublic.com/view/story/b38a46f665554021bf7d9a19ae3f2188/VA--Power-Plant-Restart/ Information also derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Southern's 839 MW Farley Nuclear Unit 2 in Alabama Reduced to 80 Percent by June 19

The Nuclear Regulatory Commission reported that on the morning of June 18 the unit was operating at full power. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Update: Progress Energy's 811 MW Brunswick Nuclear Unit 2 in North Carolina Ramped Up to 93 Percent by June 18

The Nuclear Regulatory Commission reported that on the morning of June 17 the unit was operating at 50 percent. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Update: Calpine's 561 MW Los Medanos Energy Center Gas-Fired Plant in California Returns to Service by June 18

According to the California Independent System Operator, the plant reported a return from an unplanned outage by June 18.

http://www.caiso.com/unitstatus/data/unitstatus201106181515.html

AES's 506 MW Redondo Beach Gas-Fired Unit 7 in California Returns to Service by June 18

According to the California Independent System Operator, the unit reported a return from an unplanned outage by June 18.

http://www.caiso.com/unitstatus/data/unitstatus201106181515.html

Update: Dynegy's 335 MW El Segundo Gas-Fired Unit 3 in California Returns to Service by June 17

According to the California Independent System Operator, the unit reported a return from an unplanned outage by June 17.

http://www.caiso.com/unitstatus/data/unitstatus201106171515.html

Update: Duke's 756 MW Moss Landing Gas-Fired Unit 7 in California Returns to Service by June 19

According to the California Independent System Operator, the unit reported a return from an unplanned curtailment by June 19.

http://www.caiso.com/unitstatus/data/unitstatus201106191515.html

AEP's 675 MW Pirkey Coal-Fired Unit in Texas Shut June 18

According to a filing with state regulators, the unit was shut due to a hydraulic fluid leak on a turbine valve. Reuters, 02:05 June 18, 2011

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155818

Enmax's 250 MW Calgary Gas-Fired Unit in Alberta Shuts June 19

Reuters, 07:14 June 20, 2011

ATCO's 368 MW Battle River Coal-Fired Unit 3 in Alberta Shuts June 19

Reuters, 07:14 June 20, 2011

TransAlta's 381 MW Keephills Coal-Fired Unit 3 in Alberta Shuts June 19

Reuters, 07:14 June 20, 2011

OPG's 515 MW Pickering Nuclear Unit 1 in Ontario Shuts June 19

Reuters, 07:14 June 20, 2011

Update: NPPD Declares "Notice of Unusual Event" Due to Missouri River Flooding at 791 MW Cooper Nuclear Unit in Nebraska June 19

According to a filing with the Nuclear Regulatory Commission (NRC), the rising flood waters exceeded the "Emergency Action Level HU1.5 elevation of 899 feet" at the Nebraska Public Power District (NPPD) facility. According to another filing on June 19, levees protecting a training facility at the plant were topped over by flood waters. Operators are using more than 5,000 tons of sand to construct barricades around the facility. No major plant equipment is currently offline. If water levels continue to rise to 902 feet above sea level, operators will take the station offline. However, water levels are expected to crest at 900 feet above sea level.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110620en.html

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110620en.html

http://www.nppd.com/Newsroom/NewsRelease.asp?NewsReleaseID=503

http://www.twister933.com/cc-common/news/sections/newsarticle.html?feed=122285&article=8725134

Update: OPPD's 478 MW Fort Calhoun Nuclear Unit in Nebraska Will Not Reactivate Until Flooding Subsides

The Omaha Public Power District (OPPD) plant, which has been shut since April 9 for refueling, is currently being protected from the Missouri River by a giant rubber barrier. Regulators and operators say that photographs showing the facility surrounded by water are not a cause of concern.

 $\underline{\text{http://www.kxan.com/dpps/weather/us_wx_news/regulators-say-neb-nuclear-plants-prepared-for-flood-nt11-jgr_3851042}$

http://www.omaha.com/article/20110617/NEWS01/706179913/0

http://news.yahoo.com/s/nm/20110617/us_nm/us_flooding_nuclear_2

Update: FPL Removes Smoke Stacks and Boilers as Part of Project to Replace Oil-Fired Riviera Beach Power Plant in Florida with New 1,250 MW Gas-Fired Facility

The new Florida Power & Light (FPL) combined-cycle plant, named the Riviera Beach Next Generation Clean Energy Center, is due to open by 2014.

http://www.fpl.com/news/2011/061911.shtml

Petroleum

Update: Alon's 80,000 b/d Krotz Springs, Louisiana Refinery Ramping Up Production to Full Capacity June 20

Alon restarted the crude unit ten days ago, and is now bringing the facility back to full capacity. The refinery was shut six weeks ago due to high waters and a lack of crude supplies stemming from Mississippi River flooding. Operators used the unplanned outage as an opportunity to perform maintenance work. Reuters, 10:17 June 20, 2011

Update: SRU Restarts at Frontier Oil's 130,000 b/d El Dorado, Kansas Refinery June 19 after Previous Failure

The sulfur recovery unit (SRU) originally failed on June 15.

DJN, 08:45 June 20, 2011 Reuters, 00:27 June 20, 2011

http://www.reuters.com/article/2011/06/17/refinery-operations-frontier-eldorado-idUSWNAB562320110617

Update: Valero Delays Restart of 287,000 b/d Port Arthur, Texas Refinery, Forcing Facility to Continue Running at Reduced Rates for at Least One More Week

A 100,000 b/d coker and a 175,000 b/d crude unit were both shut when lightning struck the refinery on June 6. http://www.bloomberg.com/news/2011-06-17/gulf-gasoline-rises-as-valero-port-arthur-restart-said-delayed.html

Equipment Malfunction, Flaring Reported at PBF Energy's 182,000 b/d Delaware City, Delaware Refinery June 17

Though operators did not specify which unit malfunctioned, previous filings with state regulators indicate that a carbon monoxide boiler malfunctioned on Friday, leading to a release of hydrogen cyanide through a wet gas scrubber.

Reuters, 17:48 June 19, 2011

IEA Predicts North America to Be World's Fastest Growing Oil-Producing Region Outside OPEC by 2016

According to the International Energy Agency (IEA), oil sands development in Alberta will be the prime driver for an estimated 1.5 million b/d capacity increase, for a total North American production number of 15.6 million b/d. http://www.bloomberg.com/news/2011-06-16/iea-says-north-american-oil-output-growth-strongest-outside-opec.html

Thieves Stole Nearly 1 Million Barrels of Oil Products from Pemex during First Four Months of 2011

According to the director of Pemex, sophisticated thieves stole the equivalent of 100 tanker trucks of oil products each day over the four month period in Mexico, with a total value of \$250 million. The amount stolen is 50 percent higher than during the same period last year. Officials say that Mexican drug cartels are involved in the thefts. So far 556 illegal taps have been discovered on state-owned pipelines this year, compared to 710 taps in all of 2010. http://www.washingtonpost.com/world/americas/mexican-official-says-gangs-stole-250-million-in-oil-in-4-months/2011/06/16/AGCbRvXH story.html

Costa Rica's President Rejects Mallon Oil's Proposal to Drill for Oil, Citing Environmental Concerns

The company, a subsidiary of Black Hills Corporation, had said last week that it planned to pursue rights to explore for oil in Costa Rica. The company was originally given a 20-year concession in 2000 to produce oil and natural gas in the country, but the project has so far been blocked from proceeding. The president of Costa Rica said that Costa Rica would consider allowing Mallon to drill for natural gas, but not for oil. http://www.rigzone.com/news/article.asp?a id=108162

Statoil to Increase Production from 1.9 Million boe/d in 2010 to 2.5 Million boe/d in 2020

The company will ramp up production in three phases from 2012 to 2020. http://www.rigzone.com/news/article.asp?a id=108187

Statoil Announces Oil and Gas Discoveries Offshore Brazil and Norway

Statoil announced that the Peregrino South field offshore Brazil contains between 150 and 300 million recoverable barrels of oil equivalent. Expected recoverable resources from the Skrugard oil discovery in the Barents Sea offshore Norway also increased to 250 million barrels of oil equivalent – it was not clear from reports how much the company previously estimated existed at the Skrugard field. http://www.rigzone.com/news/article.asp?a_id=108187

Update: Delek's 75,000 b/d El Dorado, Arkansas Refinery Returns to Normal Operating Rates June 15

The refinery had been running at reduced rates since May 8, as Mississippi River flooding required the suspension of deliveries from a crude pipeline supplying the refinery. The pipeline recently returned to service and resumed shipments to the refinery.

Reuters, 17:04 June 17, 2011

http://www.downstreamtoday.com/news/article.aspx?a_id=26963

Natural Gas

Nothing to report.

Other News

Nothing to report.

Energy Prices

U.S. Oil and Gas Prices June 20, 2011				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	92.90	97.30	76.88	
NATURAL GAS Henry Hub \$/Million Btu	4.39	4.75	5.14	

Source: Reuters

Energy Notes

ComEd Reports Storms Knock Out Power to 16,700 Customers in Illinois June 20 – All but 4,900 Restored by Late Morning

http://southtownstar.suntimes.com/news/6062722-418/storms-leave-7400-south-suburban-homes-without-power.html

BGE Restores Power to 15,000 Maryland Customers Following June 17 Storms

 $\underline{\text{http://files.shareholder.com/downloads/CEG/1289436446x0x477354/b6cf50a3-8f1a-4af6-9de6-40e6a73d0e8b/BGE_Release_6.10_Storm_Release.pdf}$

http://articles.baltimoresun.com/2011-06-18/news/bs-md-power-outages-20110618 1 bge-power-electric-service

Midwest Wind Energy LLC Plans to Open 80 MW Wind Farm in Broken Bow, Nebraska by 2013

http://www.kotanow.com/Global/story.asp?S=14933903

Update: PacifiCorp Plans to Open 637 MW Lake Side 2 Gas-fired Combined Cycle Power Plant in Vineyard, Utah in Spring 2014

http://www.prnewswire.com/news-releases/siemens-to-supply-power-island-equipment-to-utah-124184654.html

Solena Fuels' Green Sky California Biomass-to-Liquids Facility in California to Produce up to 16 MMGal/Year of Jet Fuel by 2015 for Northern California Airports – Facility Will Also Produce 14 Million Gallon Equivalents per Year of Other Energy Products

http://www.solenafuels.com/sites/default/files/Seven%20ATA%20Member%20Airlines%20sign%20LOI%20with%20Solena%20Fuels.pdf

Sprague Energy Oil Pipeline Spills Disputed Amount of Fuel Oil #6 in Piscataqua River in New Hampshire June 16 – Sprague Believes the Spill is "Substantially Less" than Pipeline Capacity of 4,700 Gallons

http://www.businessweek.com/ap/financialnews/D9NTRH700.htm http://www.seacoastonline.com/articles/20110617-NEWS-110619743

Apache Announces Oil Discoveries of Over 12,300 b/d in Faghur Basin, Egypt June 16 http://www.pennenergy.com/index/petroleum/display/3251588996/articles/pennenergy/petroleum/exploration/2011/06/apache-makes five.html?cmpid=EnlWeeklyPetroJune172011

Replacing Nuclear Power Plants in All Large Countries with Wind Power Would Require 25,000 Wind Turbines Spread Across an Area One and a Half Times the Size of Rhode Island: Carnegie Mellon Professor

http://www.prnewswire.com/news-releases/shutting-down-us-nuclear-plants-would-have-daunting-effect-on-economy-and-environment-says-carnegie-mellon-expert-124067744.html

Multiple Equipment Failures and Unit Shutdowns Reported at Goldsmith Gas Plant in Texas June 17-20 – Malfunction Briefly Shuts Entire Plant June 18

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155819

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155839

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155832

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155833

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155834

High Oil Temperature Leads to Flaring at XTO Energy's Russell Compressor Station in Texas June 18

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155836

AGI Compressor Briefly Shuts after Wire Shorts at Waha Gas Plant in Texas June 18 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155837

Fuel Pressure Controller Malfunction Forces All Four Units to Shut at Loving Booster Station in Texas June 18

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155828

Compressor Goes Down Twice on Vibration and High Discharge Temperature at Lehman Compressor Station in Texas June 18

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155829

Pawnee Gas Treatment Plant in Texas Briefly Shut Due to Valve Failure June 17 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155821

Equipment Problem Forces Acid Gas Compressor C-14 Shut at Sand Hills Gas Plant in Texas June 17-20

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=155809

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA) http://www.eia.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil gas/petroleum/data publications/weekly petroleum status report/wpsr.html Updated after 10:30 AM & 1:00 PM EST every Wednesday.

Natural Gas Weekly Update from EIA

http://www.eia.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM EST every Thursday.

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